AXIS I8016-LVE Network Video Intercom

Compact and robust video intercom

AXIS I8016-LVE Network Video Intercom is a compact and highly robust network intercom designed for two-way communication, video identification, and remote entry control. It offers 5 MP resolution with invisible IR night vision, and exceptional audio volume with echo and noise cancellation to ensure reliable 24/7 identification even in the most demanding situations. Based on open IP standards and interfaces, this network intercom offers great integration possibilities and is a perfect complement to any video surveillance system. Furthermore, it features multiple inputs and outputs for remote control of door locks and other equipment.

> **High-quality audio and video**

> **Easy installation with PoE**

> **Open interface with IP phone integration, SIP support**

> **Anti-ligature, vandal-resistant IK10-rated**

> **IP66/IP69-rated with wall-mount**

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Camera

Image sensor	1/2.7" progressive scan RGB CMOS
Lens	1.95 mm, F2.2 Horizontal field of view: 140° Vertical field of view: 114° M12 mount, fixed iris
Day and night	Automatically removable infrared-cut filter
Minimum illumination	**Color:** 0.16 lux at 50 IRE, F2.2 **B/W:** 0.00 lux at 50 IRE, F2.2, with IR illumination on
Shutter speed	1/50000 s to 1/5 s

System on chip (SoC)

Model	ARTPEC-7
Memory	2048 MB RAM, 512 MB Flash

Video

Video compression	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles H.265 (MPEG-H Part 2/HEVC) Main Profile Motion JPEG
Resolution	2592x1944 240x160
Frame rate	Up to 30/25 fps (60/50 Hz) in all resolutions
Video streaming	Multiple, individually configurable streams in H.264, H.265 and Motion JPEG Axis Zipstream technology in H.264 and H.265 Controllable frame rate and bandwidth VBR/ABR/MBR H.264/H.265 Video streaming indicator
Image settings	Saturation, contrast, brightness, sharpness, forensic WDR: up to 120 dB depending on scene, white balance, day/night threshold, tone mapping, exposure mode, exposure zones, defogging, compression, text and image overlay, polygon privacy mask

Audio

Audio streaming	Two-way, full duplex Echo cancellation and noise reduction
Audio encoding	24bit LPCM, AAC-LC 8/16 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16 kHz Configurable bit rate
Audio input/output	Line input, line output, built-in microphone (can be disabled), built-in speaker, automatic gain control Built-in speaker 78 dB sound pressure at 1 kHz at 1 m distance (84 dB at 0.5 m / 20 in)

Network

Security	IP address filtering, HTTPS[a] encryption, IEEE 802.1x (EAP-TLS)[a] network access control, user access log, centralized certificate management, signed video, secure keystore (CC EAL4 certified), TPM (FIPS 140-2 certified)
Network protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS[a], HTTP/2, TLS[a], QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTP, SRTP/RTSPS, TCP, UDP, IGMP, RTCP, ICMP, DHCPv4/v6, ARP, SSH, NTCIP, SIP, LLDP, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), Link-Local address (ZeroConf)

System integration

Application Programming Interface	Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at *axis.com* One-click cloud connection ONVIF® Profile G, ONVIF® Profile M, ONVIF® Profile S, and ONVIF® Profile T, specification at *onvif.org*
VoIP	Support for Session Initiation Protocol (SIP) for integration with Voice over IP (VoIP) systems, peer to peer or integrated with SIP/PBX Tested with various SIP software such as Cisco, Bria and Grandstream Tested with various PBX softwares such as Cisco, Avaya and Asterisk Supported SIP features: secondary SIP server, IPv6, SRTP, SIPS, SIP TLS, DTMF (RFC2976 and RFC2833), NAT (ICE, STUN, TURN), Contact list, parallel call forking, sequential call forking

	Supported codecs: PCMU, PCMA, opus, L16/16000, L16/8000, speex/8000, speex/16000, G.726-32, G.722
Event triggers	Analytics, external input, edge storage events, virtual inputs through API Call: DTMF, state, state changes Detectors: audio detection, live stream accessed, shock detection, tampering, motion alarm Hardware: Casing open, temperature, relays and outputs, network Input Signal: digital input port, manual trigger, virtual inputs MQTT subscribe Storage: disruption, recording System: system ready Time: recurrence, use schedule PTZ: moving, preset reached
Event actions	Axis door control Make call: SIP, API Terminate call: SIP, API Record video and audio: SD card and network share Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share, and email Pre- and post-alarm video or image buffering for recording or upload Notification: email, HTTP, HTTPS and TCP External output activation, play audio clip, overlay text, PTZ controls, status LED, WDR mode MQTT publish
Data streaming	Event data

Analytics

Applications	**Included** AXIS Video Motion Detection Support for AXIS Camera Application Platform enabling installation of third-party applications, see *axis.com/acap*

Cybersecurity

Edge security	**Software:** Signed firmware, brute force delay protection, digest authentication, password protection, AES-XTS-Plain64 256bit SD card encryption **Hardware:** Secure boot, Axis Edge Vault with Axis device ID, signed video, secure keystore (CC EAL4+, FIPS 140-2 level 2 certified hardware protection of cryptographic operations and keys)
Network security	IEEE 802.1X (EAP-TLS)[a], IEEE 802.1AR, HTTPS/HSTS[a], TLS v1.2/v1.3[a], Network Time Security (NTS), X.509 Certificate PKI, IP address filtering
Documentation	*AXIS OS Hardening Guide* *Axis Vulnerability Management Policy* *Axis Security Development Model* AXIS OS Software Bill of Material (SBOM) To download documents, go to *axis.com/support/cybersecurity/resources* To read more about Axis cybersecurity support, go to *axis.com/cybersecurity*

General

Casing	Anti-ligature, IP66/IP69-, NEMA 4X- and IK10-rated Stainless steel, zink, and plastic casing Color: black NCS S 9000-N For repainting instructions of skin cover or casing and impact on warranty, contact your Axis partner. This product can be repainted
Mounting	Recessed mounting using US 2-Gang-, 4 inch square installation boxes or AXIS TI8202 Recessed Mount Wall Mounting using AXIS TI8602 Wall Mount Wall Mounting with conduit pipe using AXIS TI8602 Wall Mount and AXIS TI8603 Conduit Adapter
Power	Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3 Typical 4.7 W, max 12.7 W **Relay rating:** 30 V, 0.7 A
Connectors	Shielded RJ45 10BASE-T/100BASE-TX PoE I/O: 6-pin terminal block for 2 inputs/outputs, +12 V 400 mA supply, and 1 relay 4-pin terminal block for audio input and output
IR illumination	Power-efficient, long-life 940 nm IR LEDs

	Range of reach 5 m (16 ft) or more depending on the scene
Storage	Support for microSD/microSDHC/microSDXC card and encryption Recording to network-attached storage (NAS) For SD card and NAS recommendations see *axis.com*
Operating conditions	-40 °C to 60 °C (-40 °F to 140 °F) Start-up temperature: -40 °C (-40 °F) Humidity 10–100% RH (condensing)
Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5–95% RH (non-condensing)
Approvals	**EMC** EN 50121-4, EN 55032 Class A, EN 55035, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, ICES-3(A)/NMB-3(A), IEC 62236-4, KC KN32 Class A, KC KN35, RCM AS/NZS CISPR 32 Class A, VCCI Class A **Safety** CAN/CSA-C22.2 No. 60950-22, CAN/CSA C22.2 No. 62368-1, IEC/EN/UL 62368-1,IEC/EN/UL 60950-22, IEC 62471 **Environment** IEC 60068-2-27, IEC 60068-2-6, IEC/EN 60529 IP66/IP69, IEC/EN 62262 IK10, NEMA 250 Type 4X **Network** NIST SP500-267

Dimensions	Height: 124 mm (4.9 in) Width: 124 mm (4.9 in)
Weight	900 g (2.0 lb)
Included accessories	Installation guide, Windows® decoder 1-user license, terminal block connector, Allen key (Resitorx 10)
Optional accessories	AXIS TI8202 Recessed Mount AXIS TI8602 Wall Mount AXIS TI8603 Conduit Adapter AXIS TI8902 Glass Replacement Kit AXIS TI8901 Face Plate Replacement AXIS A9801 Security Relay For more accessories, see *axis.com*
Video management software	AXIS Companion, AXIS Camera Station, video management software from Axis Application Development Partners available at *axis.com/vms*
Languages	English, German, French, Spanish, Italian
Warranty	5-year warranty, see *axis.com/warranty*

a. *This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (eay@cryptsoft.com).*

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